

3 2 1052

3550

MEMORANDUM

DATE: October 8, 1991

SUBJECT: Review of Fish Sampling Analytical Techniques, Olin
Chemicals/McIntosh Plant Site, McIntosh, AlabamaFROM: Julie W. Keller *JW Keller*
ToxicologistTO: Ken Lucas
Remedial Project ManagerTHROUGH: Elmer Akin *EAK*
Health Assessment Officer

Per your request, I have reevaluated several issues presented in the Fish Sampling Analytical Techniques and discussed in the October 7, 1991 meeting with Olin and Woodward-Clyde Consultants.

The detection limits as stated in Section 4.0 are acceptable for human health risk assessment purposes. The EPA Fish Tissue Criteria are significantly lower than the stated detection limits for Hexachlorobenzene, 4,4'-DDT, 4,4'-DDD, and 4,4'-DDE. However, these criteria assume a much higher level of exposure than would be practical for this site, i.e. more fish meals eaten over a longer duration. Using the detection limit as the contaminant concentration and assuming an average daily intake of 6.5 grams for a 70 Kg adult over 30 years, the resulting carcinogenic risk for all of the above listed compounds is in the acceptable risk range. I have not considered the ecological impacts of these detection limits.

As agreed upon in the meeting, the metals data from the recent sediment sampling will be evaluated, prior to fish analysis, and if indicated specific metals will be added to the list of indicator parameters.

I understand that pentachlorobenzene and pentachloronitrobenzene were not deleted from the list of indicator parameters. I also understand and agree with eliminating Endosulfan I and delta-BHC from the list of indicator parameters based on lack of GC/MS confirmation.

If I can be of further assistance or if you have any questions please contact me at xl586.